

## Predicting the Problem Behavior in Adolescents

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### Abstract

*Problem statement:* Problem behavior theory describes both protective factors and risk factors to explain adolescent problem behaviors, such as delinquency, alcohol use, and reckless driving. The theory holds that problem behaviors involving risky behavior are used by adolescents as a means to gain peer acceptance and respect. Problem behaviors constitute a significant part of gaining independence from the family, coping with stress, and eliminating or reducing negativity and pressure.

*Purpose of study:* This study was designed to examine the risk factors related to personality systems, the risk factors related to perceived environment, and the effects of risk-taking variables on problem behavior in a structural model.

*Methods:* This study constitutes causal comparative research in which the effects of personal system risk factors, perceived environment risk factors, and risk-taking variables on problem behavior are analyzed and performed using correlation research. Data have been collected during research sessions with different age groups, and cross-sectional research methods have been used. The dependent variable of the research is problem behavior, while the independent variables are personality characteristics and environment. The mediating variable is risk-taking. The study sample consists of adolescents aged 15 to 18 in Turkey. With purposive sampling, 2834 adolescents with different socioeconomic and cultural characteristics from three Turkish cities (i.e., Ankara, Sivas, and Muğla) were selected. Both a personal data form and the Adolescent Health and Development Questionnaire (AHDQ) were used. For data analysis, participants' demographic characteristics and average scores according to scale frequency and percentage distribution were used. In

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order to test the developed model, a path analysis with latent variables method, which puts forth both mediation and direct effects, was implemented.

*Conclusion and recommendations:* Findings demonstrated that risk factors mentioned in problem behavior theory increase problem behavior with risk-taking. As a tendency to take risks increases, the probability of exhibiting problem behavior increases. When observing the risk factors in personality systems and perceived environment systems, the particular risk factors of stress, depression, self-esteem, and alienation in the personality system lead to an individual's risk-taking, hence his or her demonstrating increased problem behavior. Risk factors in perceived environment, such as living environment, relationships with parents, and attitudes of friends, have determinative effects on adolescents' risk-taking and increase the probability of their exhibiting problem behavior. Finally, a positive correlation has been determined between a risk-taking tendency and problem behavior.

*Keywords:* Problem behavior, risk taking, adolescents, substance use

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Adolescence is a period of rapid change to an individual's life. Caused by biological change, the transition from childhood to adolescence brings about cognitive, social, and emotional changes. Changes to adolescents' lives are observable in increased social pressure, changed expectations and needs, acquisition of habits related to health, and the development of new adaptive skills. Adaptation problems in adolescents and behaviors that may negatively affect their lives are likely to emerge as a result of perceived deficiency of their social environments. According to Jessor (1991), problem behaviors prevent adolescents from achieving development tasks, fulfilling expected social roles, sensing the adequacy and success of expressed feelings, and transitioning to adulthood successfully.

Problem behavior is inevitable for adolescents and widely observed during adolescence in all cultures. Defining risk-taking behavior as problem behavior, Jessor (1991) has reported that problem behavior observed in adolescence involves characteristics of both the personalities of adolescents and the unconventional behavior in social environments partially created by adolescents. Unconventional behavior manifests in individuals who tolerate divergent or marginal behaviors and who have no ties with any social institution. It is possible, if not likely, for adolescents living in unconventional environments to exhibit all types of risky behaviors, such as substance addiction and risky sexual activity.

Jessor (1998) defines problem behavior as a group of behaviors that are functional, goal oriented, and often effective for achieving such goals. According to Jessor (1991), individuals separate themselves from their families with problem behavior and begins to spend more time with friends in order to gain autonomy

(Silbereisen & Noack, 1988). By doing so, adolescents create opportunities for themselves such as expanded social network etc.. While these behaviors can appear in harmless actions, such as wearing an unusual hairstyle, they can also lead to unwanted results that can potentially threaten an adolescent's health and life.

### **Problem Behavior Theory**

Problem behavior theory suggests that many factors stemming from both one's environment and personality play active roles in adolescent risk-taking. The theory describes both protective factors and risk factors in order to explain adolescent problem behaviors, such as delinquency, alcohol use, and risky driving.

Problem behaviors, which also involve risky behaviors, are used as a means to gain acceptance and respect from peers. They furthermore contribute to adolescents' gaining independence from their families, coping with stress, and eliminating or reducing negativity and pressure (Diclemente, Hansen, & Panton, 1996). The approach suggesting that risk-taking behavior is problem behavior defines problem behaviors as "the behaviors that can put the life of an individual in danger and can be harmful to his or her health (Diclemente, Hansen, & Panton, 1996, p.2)" such as smoking, consuming alcohol, engaging in risky or premature sexual relationships, and reckless driving. Problem behavior theory is a combination and interaction of three fundamentals systems: the personality system, the perceived environment system, and the behavior system.

### **Personality system**

A person's personality system consists of motivational structure, personal belief structure, and personal control structure. A person's motivational structure contains values and expectations about success, school, and the future. An individual's appreciation of success runs parallel to exhibiting appropriate behavior and to having low expectations about these two fields in which low expectations often cause a tendency to exhibit problem behavior. Although the thought of quitting school belongs to the motivational structure and ranks among the risk factors of personality systems, it was excluded from the model based on the assumption that quitting school might be related to current economic conditions in Turkey.

Meanwhile, a person's personal belief structure is formed by subcharacteristics, such as alienation, social criticism, low self-esteem, and stress. These characteristics form at the same time as personality risk factors. Jessor (1993) argues that variables in this structure have indirect effects on the exhibition of problem behaviors. For instance, increased criticism from social relations, alienation, and low self-esteem decrease the exhibition of problem behaviors.

Finally, a person's personal control structure is a control mechanism when exhibiting problem behaviors, when performing a behavior mistakenly, and when disruption tolerance is high. For example, when a problem behavior exhibited by an individual is not approved by the society and not exhibited frequently by members of that society but the individual does not find his or her behavior wrong, then the individual's destructiveness tolerance is considered low. At the same time,

adolescents who are socially competent have head starts regarding the development of positive skills related to occupation, education, and social success (White & Renk, 2012).

### **Perceived environment system**

The perceived environment system has both a distant structure and a close structure. The distant structure consists of models related to problem behavior, models related to appropriate behavior, social support, control level, and appreciation of success, while the close structure involves a family-relations satisfaction index including the factors of ease of access, harmony between parents and peers, parent-peer relations, living environment, peer pressure, and school activities. In regards to how the adolescent perceives his environment from his own perspective, this system has been named the perceived environment system (Bonino, Cattelino, & Ciairano, 2003; Jessor, 1991). More specifically, the distant structure consists of parental control, the effects of relationships between parents and friends, perceived support of parents and friends, and perceived stress. Calling this structure distant stems from the fact that its components have indirect effects on problem behaviors (Donovan, Jessor, & Costa, 1991). Meanwhile, the close structure more specifically consists of parental and peer approval regarding problem behavior, as well as parent and friend models. Parents who serve as positive models for adolescents will lead to adolescents' exhibiting less problem behavior.

Instead of observing adolescent relationships with teachers and friends, interpreting situations posing problem behavior with respect to the perception of the adolescent is one of the most effective methods, since an individual's perceived environment has a wider effect on his or her behaviors (Aunola, Statain, & Nurmi, 2000). Yet, among these structures, lack of control from parents and high perceptions of stress often leads adolescents to perceive that friends are more influential than parents, which leads to observable increases in the frequency of problem behaviors (Engels, Vitaro, Blokland, de Kemp & Scholte, 2004). Risk factors in the perceived environment include how much parents, peers, and an individual's environment serve as models, as well as ease of access and other specific characteristics of the living environment.

### **Behavior system**

The behavior system consists of three indices: the problem behaviors index, the healthy behaviors index, and the appropriate behaviors index. A measurement instrument consisting of these systems has been developed by Jessor, Turbin, & Costa (2004), who define problem behaviors as behaviors regarded as problems by society that fall outside of social norms and which cause unwanted negative results. Smoking, using alcohol, using substances, participating in premature sexual activity, and exhibiting anti-social behaviors are all regarded as problem behaviors. If a problem behavior within one field is exhibited, the probability of exhibiting problem behavior in other fields increases. To decrease problem behaviors, exhibiting health-

protective behaviors and participating in social activities are influential. Figure 1 presents Jessor's model, which shows the direct effects of protective factors and risk factors for problem behavior, as well as effect of moderation to reduce the impact of risk.

Each system is formed by variables that encourage exhibiting problem behavior and that control and protect the individual against exhibiting problem behavior. These are protective factors and risk factors. Protective factors have an effect on both risk factors and the emergence of problem behavior. According to Jessor, Turbin, Costa, Dong, Zhang, and Wang (2003), an adequate presence of social control and support of the perceived environment act as protective factors to facilitate decreasing the probability of an individual's exhibiting problem behaviors.

Protective factors include model protection, control protection, and support protection. Risk factors, on the other hand, consist of model risk, opportunity risk (availability and gangs), and vulnerability risk (see Fig. 1). Risk factors include the factors increasing the probability of exhibiting risky behavior, such as an individual's tendency to exhibit problem behavior. Risk factors are defined as the factors increasing the probability of being interested in problem behaviors (Costa, Jessor, & Turbin, 1999; Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995).

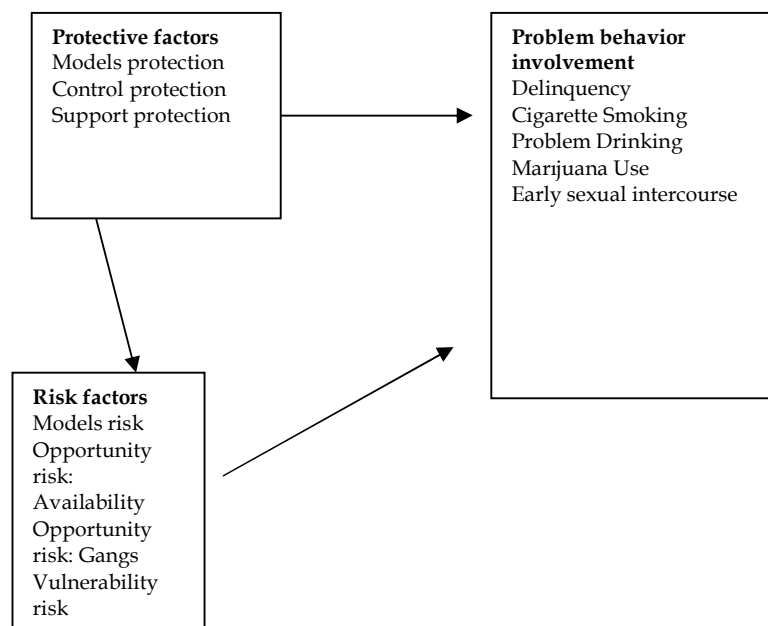


Figure 1. Explanatory model of direct effects of protective factors and risk factors on adolescent problem behavior and moderation of risk and protection (Jessor, Turbin, Costa, Dong, Zhang, & Wang, 2003, pp. 332).

According to this model, as the effect of protective factors decreases, the effect of risk factors increases (Jessor, Turbin, Costa, Dong, Zhang, & Wang, 2003). Risk factors and protective factors characterize both the individual adolescent and the social contexts of adolescent life (i.e., family, peers, school, community, workplace, and media, such as the Internet).

This was designed to examine the risk factors of the personality system, the risk factors of the perceived environment, and the effect of risk-taking variables on problem behavior in a structural model. The following five key assumptions are addressed in this study:

1. The direct effect of risk factors belonging to the perceived environment system on risk-taking is significant.
2. The direct effect of risk factors belonging to the personality system on risk-taking is significant.
3. The direct effect of risk-taking on problem behavior is significant.
4. The indirect effect of risk factors of the perceived environment system on problem behavior through risk-taking is significant.
5. The indirect effect of risk factors of the personality system on problem behavior through risk-taking is significant.

## Method

### *Research Design*

This study constitutes causal comparative research in which the effects of the personal system's risk factors, the perceived environment's risk factors, and risk-taking variables on problem behavior are analyzed and examined for correlations. Data have been gathered in one session from different age groups for which a cross-sectional method was used. The dependent variable of the research is problem behavior, independent variables are personality characteristics and environment, and the mediating variable is risk-taking.

### *Sample*

There were 2834 of high-school students in three Turkish cities (i.e., Ankara, Muğla, and Sivas) that are thought to have different socioeconomic and cultural structures, thus, purposive sampling has been employed (Palys, 2008). Among those students, 52.2 % female ( $n=1483$ ), 47.8 % male ( $n=1351$ ). 34.6 % of them ( $n=986$ ) were from Ankara, 43.9 % of them were from Sivas ( $n=1236$ ), 21.5 % of them ( $n=612$ ) were from Muğla. In the sample, while majority of participants are from the city of Sivas, the least number of them come from the city of Muğla. In addition rate of females and males is quite close to each other. In each city, the Provincial Directorate for National Education has been contacted to invite adolescents from different types of schools and different neighborhoods to participate in the study. By specifying adolescence as a qualification for individuals measured, our method applies purposive sampling, which is based on taking one or a few subsections as the sample instead of taking one representative sample of the universe. Doing so was in line with this study's objectives. In purposive sampling, the researcher identifies a

sample based on previous theoretical knowledge as well as personal to reach specific research goals (Fraenkel & Wallen, 1993). For this kind of research, determining a sample applies a maximum variety method to keep representation of the sample in mind. It has been suggested that this sampling method provides important clues about sample values (Buyukozturk, Kiliç-Cakmak, Akgun, Karadeniz, & Demirel, 2008).

#### *Research Instruments*

*Personal data form.* In order to determine demographic characteristics of the participants, a personal data form requesting information about variables such as age, gender, education level, and socioeconomic status was used.

*Adolescent Health and Development Questionnaire (AHDQ).* The AHDQ is a measurement instrument to assess the systems of personality, perceived environment, and behavior outlined by Jessor's problem behavior theory, as well as to assess structures forming these systems. This measurement instrument which has a total of 335 items, including those that would assess perceptions of adolescents regarding their relationships with their parents, their peers, and their school and environment, as well as issues related to smoking, alcohol consumption, substance use, early sexual, the exhibition of disruptive behaviors, health, and demographic characteristics. This study used the AHDQ developed by Jessor, Turbin, and Costa (2004). With consent, the Turkish version of the scale adapted by Siyez (2006) was revised by Çok, Karaman, Güney, Ercan, Büyüköztürk, and Türkmen (2009). Within the three different structures of the personality system (i.e. the motivational structure, the personal belief structure, and the personal control structure), there are 13 related subscales. Within the structures of the perceived environment system (i.e., the close structure and the distant structure), there are 32 related subscales. Within the three indices of the behavior system (i.e., the problem behaviors index, the healthy behaviors index, and the appropriate behaviors index), there are 16 subscales. This study's model, however, excludes the behavior system.

#### *Procedure*

Data have been collected from individuals living in the cities of Ankara, Sivas, and Muğla individually in order to thus analyze the group. Data were collected during three academic semesters between spring 2007 and spring 2008. During data entry, incomplete or inappropriately filled forms were excluded. The Mahalanobis distance coefficient was computed to analyze extreme values to meet normality and linearity. At the end of analysis, data that obliterate assumptions about normality and linearity were excluded, thus analysis was conducted with the data of the remaining 2818 adolescents. Since data were collected on a voluntary basis, participants were initially provided with brief information about the purpose of the study. Questionnaires were distributed to volunteers. Further explanations were provided to participants if necessary. The identities of the participants were not asked. On average, participants took 60 and 80 minutes to complete the questionnaire.

### Data Analyses

For statistical analysis, SPSS 15.00 and LISREL 8.7 package programs were used. Frequency and percentage distribution were computed to analyze participants' demographic characteristics and the averages the sample's characteristics. Path analysis with latent variables method, which outputs both mediation and direct effects, was used to test the developed model. A minimum of .05 significance was adopted.

## Results

This section first presents descriptive statistical findings related to dependent and independent variables. Then, findings related to the developed model are provided.

Table 1 presents the averages and standard deviation related to dependent and independent variables.

**Table 1**  
*Descriptive Statistics of Problem Behaviors Model*

	<i>M</i>	<i>SD</i>
Personality	26.79	1.69
Risk	6.83	3.12
Environment	21.23	4.15
Problem behavior	54.21	10.55

As shown in Table 2, adolescent's personality system ( $M=26.79$ ,  $SD=1.69$ ), environment system ( $M= 21.23$ ,  $SD= 4.15$ ), risk tendency (  $M=6.83$ ,  $SD= 3.12$  ) and problem behavior ( $M= 54.21$ ,  $SD=10.55$ ).

### *Relationships between personality system and perceived environmental risk factor, risk-taking, and problem behavior*

This section presents zero-order correlation between variables followed by findings regarding standardized coefficients that represent the relationships between the developed model and variables. Then, it presents findings related to how well the model fits. Finally, it presents findings related to the assessment of the model. Table 2 presents correlations between variables.



**Table 2**  
Zero-order Correlations Between Variables

	Personality	Risk	Environment	Problem behavior
Personality risk factors	1	.01	-.03	-.04
Risk-taking tendency		1	.31**	.38**
Environment risk factors			1	.32**
Problem behavior				1

\*\*p < .01

As shown in Table 2, there is no relationship between personality and the environment system ( $r = .01$ ). Also, no relation was found between personality and risk ( $r = .03$ ) or between personality and problem behavior ( $r = .04$ ). Environment and risk show a medium-level positive relation ( $r = .31$ ), as do risk and problem behavior ( $r = .38$ ). Finally, a medium level positive relation ( $r = .32$ ) was found between environment and problem behavior.

Measurement model (i.e., personality system risk factors, perceived environment system risk factors, and risk-taking tendency) depicted in the Figure 2 resulted in the following indices ( $\chi^2 / df = 1438,17/162 = 8.8$  ( $p = 0,00$ ), RMR = 0.40, SRMR = 0.044, RMSEA = 0.053, GFI = 0.95, AGFI = 0.94, CFI = 0.96, NNFI = 0.95). Figure 2 shows that this model indicated a good model fit the data. These values suggest that the measurement model has a good fit (Kline, 2005). Figure 2 presents the standardized analysis values for each parameter.

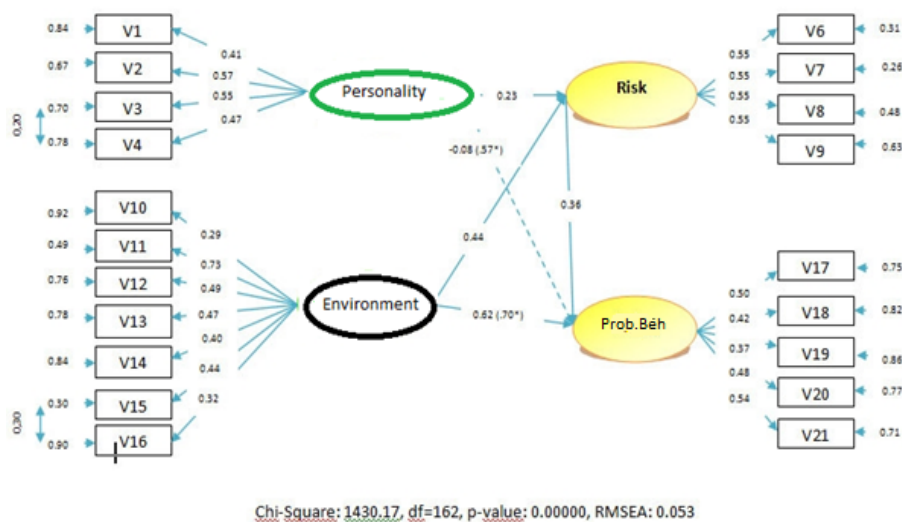


Figure 2. Model of personality perceived environment and risk-taking effects on problem behavior

As shown in Figure 2, the model's standardized coefficients expressing the relationships between dependent and independent variables change from .08 and .62 ( $p < .01$ ). Accordingly, when looking at the direct effects in the model, environment explains risk-taking at .44, while personality explains risk-taking at .23. While environment explains problem behavior at .62, personality explains at -.08. risk-taking explains problem behavior at .36.

The  $R^2$  indicator variables defined as explained variance in structural equality models are coefficients indicating to what extent they explain the variability in latent variables. When looking at the indirect effects on the model, personality over risk-taking explains problem behavior at .61, while environment over risk-taking explains problem behavior at .80. Accordingly, it is clear that there is a mediation effect of risk-taking between problem behavior and both personality and environment.

When the correlation between personality system risk factors and problem behavior model disappears, model data show a good fit ( $\chi^2/df=163=1442.60=8.8$  ( $p=0.0$ ),  $RMR=0.40$ ,  $SRMR=0.044$ ,  $RMSEA=0.053$ ,  $GFI=0.95$ ,  $AGFI=0.94$ ,  $CFI=0.96$ ,  $NNFI=0.95$ ). According to these results, the effect of personality systems risk factors on problem behaviors are completely established by way of the risk-taking-tendency variable.

As a whole, findings do not confirm that the risk factors of the perceived environment system predict a risk-taking tendency; the risk factors of the personality system predict a risk-taking tendency; and the effect of risk factors of perceived environment on problem behavior is established through risk-taking variable. Nevertheless, findings do confirm that the risk-taking variable predicts problem behavior; and the effect of risk factors of the personality system on problem behavior is established through the risk-taking variable.

### Discussion and Conclusions

This study aimed to analyze the predictive nature of variables of the personality system and perceived environment system, as well as risk-taking tendency, based on the problem behavior theory on adolescents' problem behavior. Consequently, building a model was necessary to achieve the study's aims.

The following section presents finding from both a theoretical and empirical point of view. First, a high correlation between different problem behaviors and risk factors has been observed, which aligns with the literature. (Bonino et.al., 2003; Jessor, 1998; Siyez & Aysan, 2007). Thus, our findings suggest that there is a strong relationship between problem behavior and risk factors and risk taking behavior as indirectly.

The initial findings of the study demonstrate that fewer risk factors in the personality system cause the fewer problem behaviors. At the same time, risk factors of the personality system (i.e., alienation, social criticism, stress, and low self-esteem) increase the possibility of exhibiting problem behavior. When individuals have difficulty complying with the norms and rules of society, when they isolate themselves from society, when life starts to become meaningless, and/or when they have low self-esteem, the possibility of problem behavior rises.

Secondly, the more adolescents take risks, the more problem behavior they exhibit. Though risk-taking and exhibiting problem behavior may be interchangeably used from time to time in the literature, these two concepts have different meanings. According to Jessor and Jessor (1977), problem behavior is a concept which involves risk-taking.

In terms of the problem behavior approach, risky behaviors play an important role during the transition from adolescent to adulthood and are, in fact, part of healthy adolescent development (Jessor & Jessor, 1977). This approach, which treats risk-taking behavior as problem behavior, defines negative risk-taking behaviors as behaviors that can put the individual's life in danger and cause destruction, such as smoking, alcohol consumption, substance use, and early sexual intercourse.

In contrast to researchers who consider adolescents' risk-taking behavior as a problem or negative aspect during adolescence, Hendry and Kloep (2002) regard the risk as positive in their *Model of Developmental Challenge*, which emphasizes that individuals develop and progress by overcoming challenges and taking risks. According to this model, beginning in infancy, an individual has both biological presence and various potential resources, such as social resources, skills, self-efficacy, and structural resources. What positively develops an individual is his or her ability to take risks and his or her struggle in overcoming difficulties. Although two different perspectives distinguish risk-taking behavior and problem behavior, or place them as two sub domains, risk-taking behavior and problem behavior are interrelated.

Thirdly, this study finds that as the risk factors in the environment system increase, problem behaviors increase. Limited parental control, perceptions of high stress levels, and the shift of valuing peer influence more than parental influence leads to an observable increase of problem behaviors. This finding suggests that the immediate surroundings of an adolescent influence problem behavior. In other words, when the risky behavior is exhibited, the probability of adolescents' exhibiting problem behavior increases. Particularly, friends have an important place in adolescents' exhibiting risky behavior (Gardner & Steinberg, 2005; Güney, 2007). Siyez and Aysan (2007) and Jessor (1998) reported that adolescents are much more interested in problem behaviors that are approved by their friends but that conflict with their families' values.

As represented in the model, the risk factors of the personality system have an indirect impact on problem behaviors. In other words, the mediation effect of risk-taking has been observed between risk factors in the personality system and problem behavior. This can be explained by the implication that risk factors in the personality system that strengthen risk-taking tendencies increase the probability of a high risk-taking tendency for an individual's exhibition of problem behavior.

Some studies include depression among the risk factors in the personality system and directly relate them to risk-taking. For example, Wilson, Asbridge, Kisely, and Langille (2010) have observed a significant relationship between adolescents' involvement in risky sexual intercourse and depression level. Torres and Gore-Felton (2007) reported that loneliness affects risk-taking, while Geçkil and Dunder (2011) determined that there is a relationship between health-related risky behavior

and self-esteem. If an adolescent possesses lower self-esteem, it may be related to higher levels of depression, which can lead to problem behaviors. Findings have also confirmed that low self-esteem is related to increased levels of depression and problem behaviors (Geçkil & Dunder, 2011; Siyez, 2008).

According to Youngstrom, Weist, and Albus (2003), there exists a relationship between self-esteem, depression, and problem behaviors. Predictors of risky sexual behaviors are highly interwoven with one another. For example, teenagers with depression are much more likely to engage in alcohol consumption and/or other substance use than teenagers without depressive symptoms. Furthermore, teenagers with single parents are more likely to be depressed and consume alcohol.

Likewise, as the risk factors in the environment system increase, risk-taking increases, which further increases the occurrence of problem behaviors. In other words, this study finds a mediation effect of risk-taking between risk factors in the environment system and problem behavior. Risk factors in environment system (e.g., replacement of parents with friends and ease of access) increase risk-taking tendencies, which impacts exhibiting problem behavior.

Particularly, the very nature of the social environment in which an adolescent lives presents an effect on exhibiting risky behavior. As Wilson, Asbridge, Kisely, and Langille (2010) have reported, adolescents from low-income families are more likely to be sexually active, have more than one sexual partner, fail to use condoms, and become pregnant. Adolescents with single parents or those who have a stepparent display risky behaviors more than their peers. Furthermore, Chitas (2012) posited that positive relation exists between family problems and adolescents' risk-taking; a mother's depression is more critical for an adolescent's drug use, while a father's alcoholism is more critical for adolescent's anti-social behavior. On the other hand, according to Burcu (2003), in the adolescents who feel that they are controlled by their families, friends, school administration, and the environment in which they live, the frequency of problem behavior decreases. In their study of adolescents' life settings and risk-taking among minorities living in cities, Little and Steinberg (2006) asserted that minority adolescents and their urban-based families have weak inter-neighbor relations and that parents who inadequate monitor their adolescents or use and/or sell substances leads to adolescents' displaying risky behavior. Not only sexual risk-taking but also negative sexual health outcomes can be predicted by the setting in which an adolescent is raised (Wilson, Asbridge, Kisely, & Langille, 2010). In addition, according to Ludden (2012), adolescents who think it is important to be popular exhibit more problem behavior, while intimacy with social goals and seeing friends are related to decrease problem behavior.

This study's findings indicate that risk factors in the problem behavior theory increase problem behavior through risk-taking and that as risk-taking tendency increases, the probability of exhibiting problem behavior increases. When looking at the risk factors of the personality system and the perceived environment system, particularly the risk factors of the personality system (i.e., stress, depression, self-esteem, and alienation) result in an individual's risk-taking, hence his or her increased display of problem behavior. Risk factors in the perceived environment (e.g., life setting, relations with parents, and attitudes of friends) have a significant

impact on adolescents' risk-taking and thus increase the probability of their exhibiting problem behavior. Finally, a positive relation has been determined between risk-taking tendency and problem behavior.

For further research, the factors directly or indirectly influencing individuals' problem behavior should be monitored closely. An individual's life should be investigated considering the specific context in which they live. In particular, while risk factors that lead to problem behavior could be reviewed, the ways to reduce risk factors should be reconsidered with respect to protective factors. To the extent of parenting, monitoring practices appear to be the factor with the greatest impact on the protection of risky behavior. Particularly, cooperation between a family and school should be established so that school counseling services can provide guidance not only to the family but also to the adolescent. Such guidance should focus on identity development, self-awareness, and future orientation.

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### Ergenlerde Problem Davranışı Yordayan Değişkenlerin İncelenmesi

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- Karaman, G. N. (2013). Predicting the problem behavior in adolescents, *Eğitim Araştırmaları, Eurasian Journal of Educational Research*, 52, 119-136.

#### (Özet)

*Problem Durumu:* Ergenlik dönemi bireyin yaşamında hızlı değişimlerin olduğu bir dönemdir. Biyolojik değişimin öncülük ettiği bu hızlı geçiş beraberinde, bilişsel, toplumsal ve duygusal anlamda da değişimleri getirmektedir. Ergenin içinde yer aldığı toplumsal çevrenin yetersiz olması sonucunda ergende çeşitli uyum problemleri, yaşamını olumsuz etkileyebilecek davranışlar ortaya çıkabilmektedir. Risk alma davranışını problem davranış olarak ele alan problem davranış kuramı,

olumsuz risk alma davranışının bireyin yaşamını tehlikeye sokabilecek, sağlığına zarar verebilecek davranışlar olarak tanımlamaktadır. Problem Davranış Kuramında problem olarak ele alınan davranışlar, sigara, alkol ve madde kullanımı, erken ve riskli cinsel ilişkiye girme, hızlı araba kullanma gibi davranışlardır.

Problem Davranış kuramı temelde 3 sistemden oluşmaktadır. Kişilik sistemi, Algılanan Çevre ve Davranış Sistemidir. Problem davranış kuramı, bu üç sistemin birbirini etkilemesinden oluşmaktadır.

Kişilik Sistemi, motivasyonel yapı, kişisel inanç yapısı, kişisel kontrol yapısını içermektedir. Algılanan Çevre Sistemi, problem davranışının onaylanmaması, problem davranışa ilişkin modeller, uygun davranışa ilişkin modeller, sosyal destek, kontrol düzeyi, başarıya verilen değer, aile ilişkileri memnuniyet indeksini içeren yakın yapı, ulaşılabilirlik, anababa ve arkadaş uyum, anababa ve arkadaş ilişkisi, yaşanılan çevre, arkadaş baskısı, okul etkinlikleri içeren uzak yapıdan oluşmaktadır. Davranış sistemi, problem davranışlar indeksi, sağlıklı davranışlar indeksi ve uygun davranışlar indeksi olmak üzere üç bölümden oluşmaktadır. Her sistem hem problem davranışta bulunmaya teşvik eden, hem de problem davranışta bulunmaya karşı bireyi kontrol edecek, koruyacak değişkenlerden oluşmaktadır, bunlar koruyucu etkenler ve risk etkenleridir. Koruyucu etkenler hem risk etkenleri üzerinde hem de problem davranışın ortaya çıkmasında etkilidir.

*Araştırmanın Amacı:* Bu çalışmanın amacı kişilik sistemi risk faktörleri, algılanan çevre sistemi risk faktörleri ve risk alma değişkenlerinin problem davranış üzerindeki etkisini yapısal eşitlik modeli çerçevesinde incelemektir.

Bu çalışmada beş temel araştırma sorusuna yanıt aranacaktır:

1. Algılanan çevre sistemine ait risk faktörünün risk alma üzerindeki doğrudan etkisi anlamlıdır.
2. Kişilik sistemine ait risk faktörünün risk alma üzerindeki doğrudan etkisi anlamlıdır.
3. Risk almanın problem davranış üzerindeki doğrudan etkisi anlamlıdır.
4. Algılanan çevre sisteminin risk faktörlerinin, risk alma aracılığıyla problem davranış üzerindeki dolaylı etkisi anlamlıdır.
5. Kişilik sisteminin risk faktörlerinin risk alma üzerinden problem davranış üzerindeki dolaylı etkisi anlamlıdır.

*Araştırmanın Yöntemi :* Bu çalışma kişilik sisteminin risk faktörleri, algılanan çevresel risk faktörü ve risk alma değişkenlerinin problem davranışına olan etkilerinin incelendiği nedensel karşılaştırmalı bir araştırmadır ve ilişkisel tarama modelinde yürütülmüştür.

Çalışmanın örneklem grubunu üç farklı ilden (Muğla, Sivas ve Ankara) toplam 2834 ergen oluşturmaktadır. Örneklem 1483'ünü (% 52,2) kız ergenler, 1351'ini (% 47,8) erkek ergenler oluşturmaktadır. NUTS I'e göre örneklem belirlenmiştir.



Kişisel Bilgi Formu ve Ergen Sağlığı ve Gelişimi Taraması (Adolescent Health and Development Questionnaire) Envanteri very toplamak amacıyla ergenlere uygulanmış, ölçme araçlarından elde edilen verilen yapısal eşitlik modeli ile test edilmiştir.

*Araştırmanın Bulguları:* Araştırmada, ele alınan değişkenlere ilişkin ortalama değerler ve problem davranış temelinde oluşturan model sunulmaktadır. Ergenlerin kişilik sistemi ortalama puanları 26,79; çevre sistemi ortalama puanları 21,23; risk alma eğilimi ortalama puanları 6,83 iken, problem davranış ortalama puanları 54,21 olarak bulunmuştur.

Modele ilişkin bulgulara bakıldığında, ilk olarak değişkenler arasındaki zero-order korelasyonlar, ardından geliştirilen model ve değişkenler arasındaki ilişkileri temsil eden standartlaştırılmış katsayılarla ilişkin bulgular sunulmuştur. Ardından, model iyilik uyumuna ilişkin bulgulara, son olarak da modelin değerlendirilmesine ilişkin bulgulara yer verilmiştir.

Kişilik ile çevre sistemi arasında ilişki yoktur ( $r = .01$ ). Ayrıca, kişilik ile risk arasında ( $r = .03$ ) ve kişilikle problem davranış arasında ( $r = .04$ ) ilişki bulunmamıştır. Çevre ile risk arasında olumlu yönde orta düzeyde bir ilişki ( $r = .31$ ) ve risk ile problem davranış arasında ( $r = .38$ ) olumlu yönde orta düzeyde bir ilişki vardır. Son olarak, çevre ile problem davranış arasında orta düzeyde olumlu bir ilişki ( $r = .32$ ) bulunmuştur.

Araştırmada geliştirilen modele ilişkin iyilik uyum değerleri kabul edilebilir düzeydedir. Modeli oluşturan yapıların (Kişilik Sistemi Risk Faktörleri, Algılanan Çevre Sistemi Risk Faktörleri, Risk Alma Eğilimi) uyum iyiliği değerleri ( $\chi^2/sd = 1438,17/162 = 8.8$  ( $p = 0,00$ ), RMR = 0.40, SRMR = 0.044, RMSEA = 0.053, GFI = 0.95, AGFI = 0.94, CFI = 0.96, NNFI = 0.95) tir. Bu değerler ölçme modelinin iyi uyum gösterdiğine işaret etmektedir. Araştırmanın bağımlı değişkeni ile bağımsız değişkenleri arasındaki ilişkileri ifade eden modelin standartlaştırılmış katsayıları .08 ile .62 arasında değişmektedir ( $p < .01$ ). Buna göre, modeldeki doğrudan etkilere bakıldığında çevre risk almayı .44 açıklarken, kişilik risk almayı .25 açıklamaktadır. Çevre problem davranışı .62 açıklarken, kişilik -.08 açıklamaktadır. Risk alma ise problem davranışı .36 açıklamaktadır.

Modeldeki, dolaylı etkilere bakıldığında kişilik risk alma üzerinden problem davranışı .61 açıklarken, çevre risk alma üzerinden problem davranışı .80 düzeyinde açıklamaktadır. Buna göre, problem davranış ile hem kişilik hem de çevre arasında risk almanın aracılık etkisinin olduğu görülmektedir.

Araştırma örnekleminde kişilik sistemi risk faktörleri ile problem davranış modeli arasındaki korelasyon ortadan kalktıktan sonra, modelin verilerinin iyi uyum gösterdiği saptanmıştır. Modele ilişkin değerler  $\chi^2/sd = 163 = 1442.60 = 8.8$  ( $p = 0.0$ ), RMR = 0.40, SRMR = 0.044, RMSEA = 0.053, GFI = 0.95, AGFI = 0.94, CFI = 0.96,

NNFI=0.95'tir. Bu sonuçlara göre, kişilik sistemlerinin risk faktörlerinin, problem davranışlar üzerindeki etkisini "tamamıyla" risk alma eğilimi değişkeni aracılığıyla sağlandığı söylenebilir.

*Araştırmanın Sonuçları ve Önerileri:* Bu çalışmada problem davranış kuramı temelinde ergenlerin problem davranışlarını yordayan değişkenler olarak, kişilik sistemi, algılanan çevresel risk faktörü ve risk almaya eğilim modeli geliştirilmiş ve sınanmıştır. Çalışmada farklı problem davranışların ve risk etkenlerinin birbiriyle gösterdiği yüksek korelasyonlar dikkati çekmektedir.

Sonuç olarak araştırma sonucunda elde edilen bulgular problem davranış kuramında yer alan risk faktörlerinin problem davranışı risk alma aracılığıyla artması ve risk alma eğiliminin fazla olmasıyla problem davranışta bulunma olasılığının artış göstermesi saptanmıştır. Kişilik sistemi ve algılanan çevre sistemi içerisinde yer alan risk faktörlerine bakıldığında, özellikle kişilik sistemi içerisinde yer alan risk faktörleri, stres, depresyon, benlik algısı ve yabancılaşma bireyin risk alma eğiliminde olmasına ve dolayısıyla daha fazla problem davranışta bulunmasına neden olmaktadır. Algılanan çevre sistemi içerisindeki risk faktörleri hem yaşanan çevre, anababıyla ilişkiler ve arkadaşların yaklaşımları ergenlerin risk almasında belirleyici olmakta, bu da problem davranışta bulunma olasılıklarını arttırmaktadır. Son olarak, risk alma eğilimi ile problem davranış arasında pozitif yönde bir ilişki olduğu belirlenmiştir.

Bireylerin problem davranışlarını doğrudan ya da dolaylı olarak etkileyen etkenler yakından izlenmeli ve bireyin yaşantısı bu bağlamda düzenlenmelidir. Özellikle bireyin problem davranışta bulunmasına neden olan, risk faktörleri gözden geçirilmeli ve risk faktörlerinin, koruyucu faktörlere göre azaltılması sağlanmalıdır. Özellikle aile, okul işbirliğinin sağlanarak, okul rehberlik hizmetlerinin, öğrencinin kimlik gelişimi, kendini tanıma ve gelecek planları oluşturma açısından hem aileye hem de ergene rehberlik etmesi gerekmektedir.

*Anahtar sözcükler:* Problem davranış, risk alma, ergen, madde kullanımı